

Controls SW Group Meeting

March 7, 2024

Agenda

1. Machine Recovery
2. Upcoming Schedule
3. Special Topic:
Ryan McClanahan
New SC timing selection UI

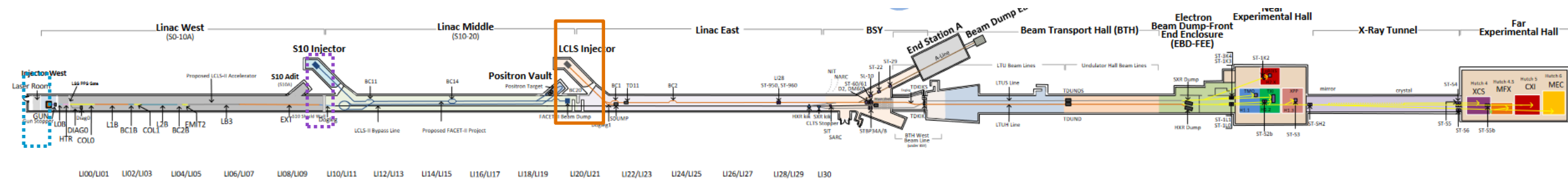
T. Summers

A lot has happened since we met last


- **Let's take a moment to be thankful for the fact we have power...**
 - **February 4 (Sunday)** – SLAC-wide power outage mid-afternoon due to tree on our 230kV line up by Skyline.
 - **February 22 (Thursday)** – power outage to B34 and neighbors due to transformer issue (water?)
 - **February 28 (Wednesday)** – power dip (one phase dropped) tripped many accelerator systems.
 - **February 29 (Thursday)** – small power glitch caused cryoplant 2K system to trip.
 - **March 2 (Saturday)** – SLAC-wide power outage due to storm around midnight, no PG&E line damage.
 - B005 and Cryoplant were up on 60 kV line by 2:30 am, but cryoplant's generator didn't start so their IOCs and OPI were down.
 - Sonya was in with the RF team to detune the cavities (prevents damage if they warm up).
 - Shawn was in trying to get the insulation vacuum pumps running to help the cryomodules stay cold (they ended up warming to 80K).
 - Controls computing infrastructure back up by 6:00 am (thanks Jingchen!).
 - Cryoplant started trying to recover inventory – they ended up losing 80-90% of their helium but have enough in backup tanks to refill. They also had a burst disc go so need to replace that before starting back up. Target linac cooldown by next Wednesday (3/13).
 - Lab switched back to 230 kV Monday morning.
 - Thank you to those others who came in or logged in and helped recover controls – this helps ACR understand the scale of the recovery effort.
 - **James and I are making a report of all equipment and software that needed to be manually recovered – please contact us**
- **Conference room TV update – the new 98” mega TV is ready to be installed, we're waiting for the mount to arrive and then the carpenters to install it (need to add wood support to the wall)**

State of the Accelerators

- **LCLS-SC**
 - Waiting for cryoplant recovery and linac cooldown to resume commissioning program – target Wednesday next week 3/13.
- **FACET**
 - Working on machine recovery now following power outage – target beam to users by this Saturday
- **LCLS-Cu/NC**
 - Also working on machine recovery, beam to TD11, phasing linac
 - Plan to have beam back to users by Tuesday or Wednesday next week.
- **Note: all linac areas will be off on Monday for global PPS tests/certification**
- SPEAR is a champ – running normally to users



Schedule for next few weeks (from Sharon)

Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
03/04/2024 <ul style="list-style-type: none"> • LINAC Recovery • SSRL Recovery • UED/ASTA Recovery 03/02 Power Outage @ 00:14	03/05/2024 <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing • <i>Limited</i>-PAMM (FACET-II, LCLS NC) • SSRL User Program 	03/06/2024 Downtime Planning Mtg <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing • LCLS NC Startup • <i>Limited</i>-PAMM (FACET-II) • SSRL User Program 	03/07/2024 <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing • S19-20 Search 01:00 • FACET-II Startup • SSRL User Program 	03/08/2024 <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing • Cryo – 2K CB Cooldown • FACET-II Startup • SSRL User Program • UED User Program 	03/09 & 03/10 <ul style="list-style-type: none"> • LCLS NC Startup • FACET-II Startup • SSRL User Program • UED User Program
03/11/2024 <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing • Cryo – D1 Fast Cooldown • SSRL PAMM • UED User Program B052 1st Floor Network Outage 7:30am-12pm	03/12/2024 <ul style="list-style-type: none"> • LINAC West PPS/BCS Testing – contingency • Cryo – D2 Fast Cooldown • LCLS NC Users • FACET-II Program • SSRL AP 	03/13/2024 Downtime Planning Mtg <ul style="list-style-type: none"> • LCLS NC Users • Cryoplant 2K Operation • FACET II Program • SSRL User Program • UED User Program 	03/14/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Restart • FACET II Program • SSRL User Program • UED User Program 	03/15/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • UED User Program 	03/16 & 03/17 <ul style="list-style-type: none"> • LCLS NC Users • FACET II Program • SSRL User Program • UED User Program
03/18/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • UED kHz Test • NLCTA Startup - tentative 	03/19/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II POMM • SSRL User Program • UED kHz Test • NLCTA Startup 	03/20/2024 Downtime Planning Mtg <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • UED kHz Test • NLCTA Startup 	03/21/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • UED kHz Test • NLCTA Startup 	03/22/2024 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • UED kHz Test • NLCTA Startup 	03/23 & 03/24 <ul style="list-style-type: none"> • LCLS NC Users • LCLS SC Program • FACET II Program • SSRL User Program • NLCTA Startup

Upcoming downtime periods

Next week's PAMM was canceled

- Next all-linac PAMM is March 26-28
 - Jobs likely due Monday March 18th
 - Area manager/CD planning meeting Tuesday 19th
 - Official job review meeting Thursday 9 am
- Time to start thinking about the summer downtime
 - It's probably only 2 or 3 power outages away! :D

Edit	Start Date ↓	End Date	Program	Machine Status	Description
809	07/05/2024	08/21/2024	All Accelerators	Downtime	FACET & Linac East Downtime
808	07/05/2024	09/30/2024	Linac West	Downtime	Linac West Downtime
797	04/23/2024	04/25/2024	All Accelerators	PAMM	4/23/2024 - 4/25/2024 PAMM
796	04/09/2024	04/11/2024	All Accelerators	PAMM	4/09/2024 - 4/11/2024 PAMM
812	04/03/2024	04/03/2024	AOSD LCLS	POMM	4/3 LCLS POMM Bucket
795	03/26/2024	03/28/2024	All Accelerators	PAMM	3/26/2024 - 3/28/2024 PAMM
810	03/19/2024	03/19/2024	FACET-II	POMM	FACET Placeholder POMM
794	03/11/2024	03/13/2024	All Accelerators	PAMM	3/11/2024 - 3/13/2024 PAMM
811	03/05/2024	03/07/2024	All Accelerators	PAMM	Post-Outage PAMM Tasks

Typical PAMM schedule

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Linac West							
S10 Inj							
Linac Mid							
S20 Inj							
Linac East							
BSY/BTHW							
BTH							
EBD-FEE							

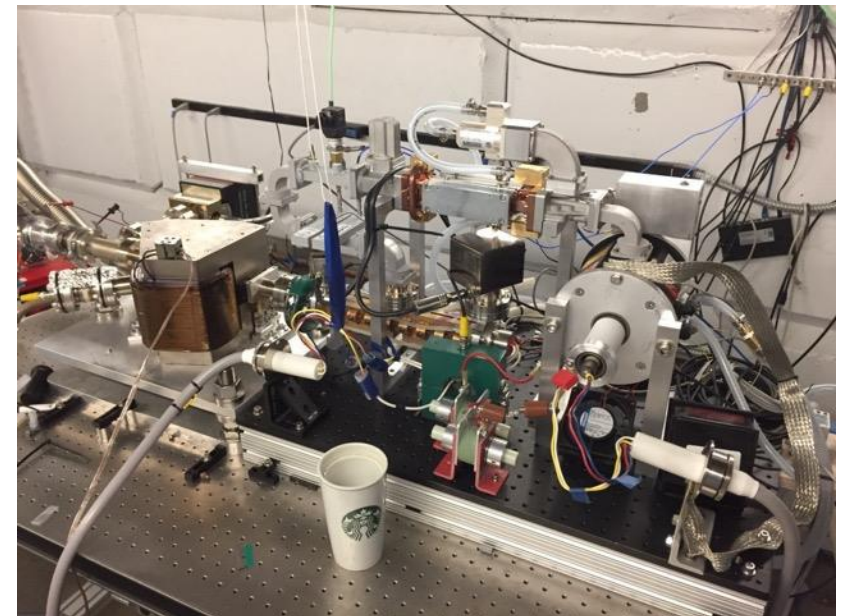
Legend

- TBD
- Permitted Access
- Controlled Access
- Search
- Safety Cert.
- No Access
- POMM
- MD/Comm.
- Users

Welcome Salime Boucher!



- **Motion and Instrumentation Department Head**
- Pronounced “Salem”
- Born and raised in Riverside, California
- BS Physics UCLA, worked for 4 years at PBPL
- Dropped out of grad school, went into industry
- SureBeam 2002-2003, RadiaBeam 2004-2019
- Expert in commercial linacs (hardware, manufacturing, testing)
- Traveled for 5 months last year (Europe, Bangladesh, Thailand, Dubai, Israel)
- Hobbies/Interests: being a nerd, travel, running, hiking, skiing, classical music and jazz, stand-up comedy, long walks on the beach



Special Topic

Ryan McClanahan

Brief overview and demo of new SC timing global setup and UI.